

AMENDMENT TO SPECIFICATION

In the Specification

A marked-up copy of the changes to selected paragraph(s) is provided below. Please enter these changes to the specification in the record.

Please **AMEND** the paragraph beginning on page 8, line 29 as follows:

Referring now to Figure 5, a system of processing video signals for summary extraction and display on the client is shown. A video signal 503 is transmitted through communication channels 502. The signal can either be an analog signal (such as NTCS or PAL) or digital (such as DirectTV). If the client is a computer 511, then processing of incoming video signal 504 is performed first at step 506. The video signal if in analog form, is first digitized to a digital signal. The summary frames extracted are then displayed at step 507 on a computer display 510. If the client is a set-top box 513 and television set 512, then processing first takes place at step 508. Again, if the incoming video signal 505 is analog, it is first digitized. The summary frames are then displayed at step 509 on a television screen 512. If the television display takes as input analog signals, then the summary frames are converted back to an analog signal and then overlaid on top of the regular TV signal for display. The overlay is performed in the set-top box 513.

Please **AMEND** the paragraph beginning on page 11, line 9 as follows:

In Figure 10A, as new frames are observed, a new set of candidate summary frames are selected. Here, frames 902 and 903 are replaced because they represent similar content to what frames 905 and 906 respectively represent, i.e., segment b is similar to segment e, and segment c is similar to segment f. The selected frames at this instant are 901, 904, 905 and 906. The summary frames are again designated as p1, p2, p3, and p4, and displayed in Figure 10B. In Figure 11A, the current frame is now at another position. Here, frames 904 and 901 are also replaced because newer frames 907 and 908 that are similar are observed. In this case, segment

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a is similar to segment h, and segment d is similar to segment g. The current set of summary frames is displayed as shown in Figure 11B.

Please **AMEND** the paragraph beginning on page 13, line 13 as follows:

It is desirable to not only allow the user to be able to see summary of video content about some time f prior to the current playback, but also to allow the user to see the summary of the video content about time $2t$, $3t$, prior to the current playback. Referring to Figure 13, to achieve this, a preferred method of selecting summary frames from the set $S = \{f_{s1}, f_{s2}, f_{s3}, \dots f_{sL}\}$ is to interleave the selection of frames. If at each step of embedding, it is desired to select and embed some M frames (assuming M divides L), the set of summary frames are listed or written into a table 70 of width L/M and height M in a row-wise fashion (i.e., place the frames in the first row first, from left to right, then in the second row, and so on), as shown by write arrow 72. In this example, $L=12$, and $L/M = 3$. At each step of the embedding, the frames are read off in a next column, as illustrated by read arrow 74. In this manner, we guarantee that each set of M summary frames selected represent video content spanning a longer period of time than merely the most recent M summary. An alternative embodiment is to also embed the summary of video of the future, i.e. about some time t , $2t$, $3t$, ... after the current playback.

The above amendments consist of adding reference numerals to subject matter depicted in the original figures and adding explanatory materials more clearly describing what is shown in the figures and /or described elsewhere in the specification. Consequently, no new matter is added.